Draft Initial Study and Draft Negative Declaration on the Proposed Delisting of the California brown pelican (*Pelecanus occidentalis californicus*)

1. Description of the Project

A. Proposed Actions

The "project" addressed by this Initial Study is the proposed delisting of the California brown pelican under provisions of the California Endangered Species Act (CESA). The project requires action and the adoption of findings by the California Fish and Game Commission relative to the proposed delisting. The Commission may also indicate support for recommendations for on-going management and agency coordination activities from the Department of Fish and Game Status Review of the California brown pelican.

Recent events leading to the consideration of the proposed action include the following:

May 26, 2006 The California Fish and Game Commission received a petition from the Endangered Species Recovery Council requesting the Commission to delist the California brown pelican (*Pelecanus occidentalis californicus*) under provisions of California Endangered Species Act (CESA).

October 3, 2006 The California Department of Fish and Game (CDFG) issued a Petition Evaluation Report, finding that the information in the petition was sufficient to indicate that petitioned action may be warranted and recommended that the Commission accept the petition.

December 7, 2006 The Commission received the Petition Evaluation Report, recommendation, and public testimony. The petition was accepted by the Commission, thereby initiating a one-year status review on the California brown pelican.

December 20, 2007 The Commission received a memorandum and Status Review of the California brown pelican (Burkett et al. 2007) from Acting Director of California Department of Fish and Game (CDFG), John McCamman. That memorandum and Status Review detail the scientific and regulatory information that led to the CDFG's recommendation to delist the California brown pelican. The memorandum and Status Review also detail the CDFG's recommendations regarding post-delisting activities.

February 8, 2008 The Commission received the Department's Status Report on the Petition to Delist the California brown pelican (*Pelecanus occidentalis californicus*) as an Endangered Species and public testimony related to the report.

March 7, 2008 The Commission received public testimony and consideration of the Department's Status Report And Recommendations regarding the Petition to Delist the California brown pelican (*Pelecanus occidentalis californicus*) as an Endangered Species.

April 10, 2008 The Commission received public testimony regarding the Petition to Delist the California brown pelican (*Pelecanus occidentalis californicus*) as an Endangered Species.

May 8, 2008 The Commission received an update on status of the environmental document regarding delisting the California brown pelican and public testimony related to the update.

As recommended by CDFG (Burkett et al. 2007:21-22), the action associated with this project is removing the California brown pelican from the California list of endangered species. CDFG also made recommendations regarding continuation of management, conservation, and periodic monitoring. Depending on the availability of resources, the latter activities could be performed by CDFG working with other agencies, including the U.S. Fish and Wildlife Service, National Park Service, Channel Islands National Marine Sanctuary, Bureau of Land Management, and other agencies and brown pelican researchers.

B. Location of Proposed Action:

The Proposed Action, as petitioned by the Endangered Species Recovery Council and recommended by the CDFG to the Commission, would encompass the known range of the California brown pelican in California (Figure 1). This includes critical nesting sites within Channel Islands National Marine Sanctuary, foraging and roosting sites along the Southern California Bight region, and areas supporting non-breeding individuals at the Salton Sea.

2. Environmental Setting

The physical setting for this project includes the breeding range of the California brown pelican in California (Channel Islands) as noted in Section 1.B. above and in Figure 1, as well as foraging and resting areas generally along the California coast where brown pelicans may be found. Essentially, the environmental setting applicable to brown pelicans includes all nearshore areas along the coast and islands in the state. The breeding areas and range are described in detail by Burkett et al (2007:5-6), which is the primary source for the information presented below.

The brown pelicans that breed in the Channel Islands are considered part of the Southern California Bight (SCB) population/management unit, which also includes the islands along the northwest coast of Baja California from the Los Coronados south to Isla San Martin. These colonies are all influenced by the oceanographic conditions of the California Current and some exchange occurs among colonies by the recruitment of new breeders. Large numbers of brown pelicans disperse northward along the Pacific coast after breeding, during the summer and fall, going as far north as British Columbia. Brown pelicans also occur inland at the Salton Sea in southern California and these birds are probably from the Gulf of California.

Specific components of the environmental setting, both physical and regulatory, considered by Burkett et al. (2007:8-16) are summarized in the following paragraphs.

Within the Southern California Bight, and specifically in the Santa Barbara Channel, brown pelicans are subject to adverse effects from oil pollution. Oil pollution may originate from natural seeps along the Santa Barbara Channel, or accidental releases from stationary platforms and sea going vessels.

Human activities near nesting or roosting sites may disturb brown pelicans and disrupt behavior during breeding and post-breeding. Human activities near breeding sites in the Channel Islands may originate from fishing (daytime and nighttime); sightseeing including boating, sea kayaking, and diving; oil spill response; or similar events. Along the California coastline, urban land uses, recreation activities, ports and piers, fishing, shipping, and a variety of human activities may affect dispersal directly or indirectly. Fish hook and fish line mortality represent direct effects that have been documented.

Natural oceanographic cycles, such as El Nino events, lead to variations in the availability of fish populations upon which brown pelicans prey. Starvation has been documented as the cause of brown pelican deaths in distinct events. In a similar fashion, variations in natural conditions lead to periodic outbreaks of domoic acid poisoning. Domoic acid occurs naturally in some plankton species. Natural variations that lead to periodic increases of such species cause domoic acid to become concentrated in fish such as anchovies that consume the plankton. The toxin is then further concentrated in brown pelicans and other species that consume the anchovies. The quantitative effects of these natural cycles have not been rigorously studied, but they have not prevented the recovery and increase of brown pelican populations during the last 20 years.

Preservation and management of brown pelican nesting sites is one of the stated purposes of the Channel Islands National Park and is one of the focal points for management activities by the National Park Service. The National Marine Sanctuaries along the California coast provide management of geologic and cultural resources and water quality along the coast (except in State waters). Both the National Park Service and the Channel Islands National Marine Sanctuary are updating their management plans, and continued protection of brown pelican breeding sites is contemplated and anticipated. West and Middle Anacapa islands are closed to public access, but there are currently no restrictions to public access at Santa Barbara Island. Marine Protected Areas (MPAs) are established at some locations in the Channel Islands, but do not encompass all waters around brown pelican nesting and foraging sites and do not prohibit all boating activity. California MPAs also include a specific protection area for brown pelican fledglings on the north side of West Anacapa Island (14 CCR 632(68)(B).)

The California Coastal National Monument program administered by the Bureau of Land Management (BLM) includes all offshore rocks and islands within 12 nautical miles of the shoreline. Seabird use of these rocks is a recognized aspect of management, which is required of the BLM. In this respect, BLM works cooperatively with CDFG, U.S. Fish and Wildlife Service, California Department of Parks and Recreation, and other agencies.

The U.S. Fish and Wildlife Service's 5-year status review recommended delisting of brown pelican under the federal Endangered Species Act (ESA), but as with all delisted species monitoring would continue for at least five years. (USFWS 2007.) It is anticipated that USFWS would obtain or provide funds for monitoring or management activities after federal delisting.

If delisted under CESA, the California brown pelican will continue to be a "fully protected species," under Fish and Game Code (FGC) section 3511(b)(2). Therefore, whether or not the species is listed pursuant to CESA or ESA, the legal prohibition on "take" of the species, as defined in FGC section 86, will remain in effect. FGC section 86 defines "take" to mean "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

Additionally, the California brown pelican would continue to be protected under the federal Migratory Bird Treaty Act (16 U.S.C. section 704).

3. Environmental Effects Checklist

The attached Environmental Checklist covers all Initial Study topics as set forth in Appendix G of the California CEQA Guidelines and an additional section related to "Climate Change", and includes the CDFG determination with respect to potential environmental impacts from the proposed delisting

4. Recommendations for Future Management

Specific management and conservation recommendations are described by Burkett et al. (2007:16-19). Some of these measures are implemented as a matter of existing law, others are recommendations that can be implemented directly by CDFG. Some recommendations involve actions by other agencies with whom CDFG would coordinate management activities. In summary, the recommendations include the following actions:

- a. Maintain the existing National Park Service closure to human access on West Anacapa Island, and access restrictions on Middle Anacapa Island.
- b. Maintain the California defined brown pelican fledging area on the north side of West Anacapa Island.
- c. Establish interagency coordination through the development of a working group that includes CDFG, USFWS, NPS, NMS, BLM, and appropriate researchers and non-governmental organizations. This partnership could be defined through a Memorandum of Understanding or similar agreement, and would address management needs and on-going monitoring.

The first two of the above items are implemented through the operation of existing law and programs, and require no additional funding beyond existing enforcement procedures. The third recommendation is provided by CDFG pursuant to the Fish and Game Code (Section 2074.6 and depends on a number of factors including available funding). Specific management recommendations and issues to be considered in such

interagency cooperation are listed by Burkett et al. (2007:17-18), and include the following actions:

- (1) Manage Santa Barbara Island and Sutil Island to maintain a brown pelican nesting colony.
- (2) Manage all Channel Island nest sites in conjunction with the Southern California Bight brown pelican populations, with special attention to Los Coronados Islands.
- (3) Identify and protect major night roost sites for brown pelicans.
- (4) Develop and implement management plans to protect brown pelicans from human disturbance at estuarine roost sites.
- (5) Work with wildlife rehabilitation groups to compile information on domoic acid outbreaks, fish hook/line mortality, and starvation events to understand better how these mortality factors affect brown pelican population trends.
- (6) Continue and expand public education efforts to help conserve brown pelicans at nest and roost sites.

5. Compatibility with Existing Zoning and Plans

The proposed project would have no direct or indirect effect on local general plans, local coastal plans or zoning.

The project has a much stronger relationship with federal and state agency plans, in particular with the National Park Service management plan for the Channel Islands National Park, and the Channel Islands National Marine Sanctuary and its draft management plan. Both agencies and plans recognize the sensitivity of brown pelican nesting and roosting sites. The proposed delisting would not eliminate other protections for brown pelicans. Similarly, the recommended management, coordination, and monitoring activities should be compatible with the plans of these other agencies. The proposed delisting would not affect the policy of managing pelagic fish species with the express attention to providing sustained and adequate food sources for the California brown pelican (anchovies, sardines and mackerel) (Coastal Pelagic Species Fishery Management Plan, Amendment 8 of the Northern Anchovy Fishery Management Plan).

In a similar manner, the proposed project as well as the recommendations regarding management, coordination, and monitoring activities will be compatible with plans and activities of the Bureau of Land Management (administering the offshore rocks and islands in the California Coastal National Monument), and the California Department of Parks and Recreation (administering state beaches, campgrounds, and related facilities). Management activities would provide a positive balance between public recreation and fishing and the protection of sensitive coastal resource areas.

6. Preparers

This Initial Study was prepared by the California Department of Fish and Game, with input and assistance from the following individuals and groups.

John P. Larson, Project Environmental Planner, URS Corporation, Santa Maria, California

Rob Roy Ramey, Wildlife Sciences International, Colorado

Craig Harrison, Hunton & Williams, Washington D.C.

Tom Roth, Law Offices of Thomas D. Roth, San Francisco

Environmental Checklist Form

- 1. Project title: <u>Delisting of the California brown pelican</u>
- 2. Lead agency name and address: <u>California Fish and Game Commission</u>, 1416 Ninth Street, Sacramento, CA 95814
- 3. Contact person and phone number: Dr. Eric Loft, Chief, Wildlife Branch, Department of Fish and Game, 1812 Ninth Street, Sacramento, CA 95811, eloft@dfg.ca.gov, (916) 445-3418
- 4. Project location: Known range of California brown pelican, including nesting sites in Channel Islands National Marine Sanctuary, foraging and roosting sites along the Southern California Bight region, dispersal areas supporting non-breeding individuals along the California coast and near the Salton Sea.
- 5. Project sponsor's name and address: Endangered Species Recovery Council, Post Office Box 1085, La Jolla, California 92038.
- 6. General plan designation: <u>varies</u>

- 7. Zoning: <u>varies</u>
- 8. Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)

 <u>Delisting California brown pelican under provisions of California Endangered Species</u>

 Act (CESA, Fish and Game Code, section 2050 et seq.)
- 9. Surrounding land uses and setting: Briefly describe the project's surroundings:

 Nearshore marine habitat associated with Channel Islands (breeding) and nearshore

 marine coastal areas throughout California and Salton Sea. See attachment for details.
- Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)
 None.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages. [NONE]

	Aesthetics		Agriculture Resources		Air Quality		
	Biological Resources		Cultural Resources		Geology /Soils		
	Hazards & Hazardous Materials		Hydrology / Water Quality		Land Use / Planning		
	Mineral Resources		Noise		Population / Housing		
	Public Services		Recreation		Transportation/Traffic		
	Utilities / Service Systems		Mandatory Finding of Significance		Climate Change		
DETE	RMINATION: (To be comp	leted	by the Lead Agency)				
On the	e basis of this initial evalua	tion:					
X			et COULD NOT have a sig 'E DECLARATION will be				
	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.						
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.						
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.						

	I find that although the proposed project could have a signific environment, because all potentially significant effects (a) has adequately in an earlier EIR or NEGATIVE DECLARATION potentially standards, and (b) have been avoided or mitigated pursuant NEGATIVE DECLARATION, including revisions or mitigation imposed upon the proposed project, nothing further is required.	ve been analyzed bursuant to applicable to that earlier EIR or measures that are
Signatı	ure	Date
Signatı	ure	Date

ENVIRONMENTAL ISSUES

			Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I.	ΑE	STHETICS:				
	W	ould the project:				
	a.	Have a substantial adverse effect on a scenic vista?				Х
	b.	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				Х
	C.	Substantially degrade the existing visual character or quality of the site and its surroundings?				Х
	d.	Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?				Х

- a. No construction or physical changes are anticipated with the action.
- b. No construction or physical changes are anticipated with the action.
- c. No construction or physical changes are anticipated with the action.
- d. No construction or physical changes are anticipated with the action.

Mitigation Measure(s)	
None required.	

			Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
II.	AG	RICULTURE RESOURCES:				
	ag en ret Ev (19 Co in	determining whether impacts to ricultural resources are significant vironmental effects, lead agencies may fer to the California Agricultural Land raluation and Site Assessment Model 1997) prepared by the California Dept. of proservation as an optional model to use assessing impacts on agriculture and remland. Would the project:				
	a.	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				Х
	b.	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				Х
	C.	Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				X

- a. No prime farmland is associated with nesting, feeding, or roosting areas. No physical changes are expected.
- b. No prime farmland is associated with nesting, feeding, or roosting areas. No physical changes are expected.
- c. No prime farmland is associated with nesting, feeding, or roosting areas. No physical changes are expected.

Mitigation Measure(s)		
None required.		
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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
III. CLIMATE CHANGE On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California's greenhouse gas (GHG) emissions to 2000 levels by 2010, to 1990 levels by 2020 and 80 percent below the 1990 levels by the year 2050. In 2006 this goal was reinforced with the passage of AB 32, the Global Warming Solutions Act of 2006. AB 32, among other requirements, sets the same overall GHG emissions reduction goals. Executive Order S-20-06 directs state agencies to begin implementing AB 32, including the recommendations made by the state's Climate Action Team. Because the California brown pelican is a "fully protected" species under state law, and "take" continues to be prohibited as a result of that designation, no change in protection is expected and thus no additional GHG emissions will result from the project as proposed.				×

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. AIR QUALITY				
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?				Х
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				X
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				X
d. Expose sensitive receptors to substantial pollutant concentrations?				Х
e. Create objectionable odors affecting a substantial number of people?				Х

- a. No physical construction or changes in land use patterns anticipated.
- b. No physical construction or changes in land use patterns anticipated.
- c. Existing non-attainment areas within state would not be affected by the project.
- d. The project would not release any pollutants nor would it alter population distribution or patterns of human activity.
- e. The project would not release any odors or expose people to odor sources.

Mitigation Measure(s)		
None required.		

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
٧.	BIOLOGICAL RESOURCES				
	Would the project:				
	a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				X
	b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				X
	c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
	d. Interfere substantially with the move- ment of any native resident or migratory fish or wildlife species or with estab- lished native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				Х
	e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
	f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				Х

a. (Effect on sensitive species) Burkett et al (2007) provide details regarding the distribution and status of California brown pelican, recommend delisting of California brown pelican, and list recommendations regarding management steps and monitoring to possibly be implemented in cooperation with other agencies.

These actions will not have a significant impact on the environment related to effects on any species listed by the federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA), or on other sensitive species. Information supporting this determination is presented below in two major discussions: (1) related to the California brown pelican, and (2) related to species with overlapping habitat or ranges.

(1) California Brown Pelican

The proposed delisting will not adversely affect populations of California brown pelicans, primarily because it will not lead to or allow any changes in the physical environment or in regulatory and sanctuary planning involving the species. The overall setting in which California brown pelicans exist has also changed in ways that reduce potential threats to the population. Factors that support the conclusion that the project will not adversely affect California brown pelican are listed below:

- (a) California brown pelicans now exceed 200,000 birds across its entire range (of which California is the northern periphery of the subspecies). The breeding population in the Channel Islands has been increasing and now exceeds 8,500 breeding pairs. The subspecies is no longer viewed as endangered or threatened, and the recommendations of the CDFG (Burkett et al. 2007) and the U.S. Fish and Wildlife Service (2007/2008) have been to delist under the CESA and ESA respectively.
- (b) If delisted under CESA, the California brown pelican will continue to be a "fully protected species," under Fish and Game Code (FGC) section 3511(b)(2). Therefore, whether or not the species is listed pursuant to CESA, the legal prohibition on "take" of the species, as defined in FGC section 86, will remain in effect. Additionally, the California brown pelican would continue to be protected under the federal Migratory Bird Treaty Act (16 U.S.C. section 704).
- (c) The primary human-caused threats to the continued existence of the California brown pelican have been reduced such that the subspecies has increased in numbers, range, and overall productivity. Consequently, the subspecies has been petitioned for delisting under the CESA and the ESA. Specifically, these threats have been reduced through:
 - (i) Ban on DDT use (except in rare cases authorized by the Environmental Protection Agency), and elimination of ocean dumping of DDT-laden wastewater and clean up of affected areas (see Appendix A discussion on DDT);
 - (ii) Legislated oil spill prevention and response measures (see Appendix A discussion on oil spills);
 - (iii) Oil spill trust funds for seabird research and restoration (American Trader

Trust, Command Oil Spill Seabird Restoration)

- (iv) Protection of key nesting and rooting habitats through a network of protected areas, few of which existed when the California brown pelican was listed. These include, but are not limited to: National Marine Sanctuaries (Channel Islands National Marine Sanctuary, Monterey Bay National Marine Sanctuary, Gulf of the Farallones National Marine Sanctuary, and Cordell Bank National Marine Sanctuary), National Parks and Monuments (Channel Islands National Park, Point Reyes National Seashore, California Coastal National Monument), National Wildlife Refuges (Guadalupe-Nipomo Dunes National Wildlife Refuge in San Luis Obispo County; the San Diego National Wildlife Refuge Complex; Tijuana Slough National Wildlife Refuge; Farallon National Wildlife Refuge); State Parks and Reserves (including Salton Sea, Moss Landing, and Año Nuevo); and multi-species habitat conservation plans (City and County of San Diego Multiple Species Habitat Conservation Plans);
- (v) Protection and enhancement of habitat on military lands (Vandenberg Air Force Base, Camp Pendleton, Naval Amphibious Base Coronado), through memoranda of understanding with the U.S. Fish and Wildlife Service and Integrated Natural Resources Management Plans (see discussion on California least tern);
- (vi) Regulation of fishing and establishment of fishing exclusion zones to prevent overharvest (The water surrounding Anacapa and Santa Barbara Islands are designated as California State Ecological Reserves; Marine Reserves or Marine Conservation Areas are proposed within the Channel Islands Marine Sanctuary);
- (vii) Regulations and management plan to prevent potential human disturbance in nesting colonies in the Channel Islands National Park;
- (viii) Regulations and fishery management plans in which pelagic fish species that are the prey of California brown pelicans (e.g., anchovies, sardines and mackerel) are managed with express attention given to providing sustained and adequate forage for predators (Coastal Pelagic Species Fishery Management Plan, Amendment 8 of Northern Anchovy Fishery Management Plan).

In summary, the successful long-term increases in California brown pelican population, combined with the continued protection afforded by other statutes and programs and with the reduction in threats to reproduction and habitat, support the conclusion that the proposed delisting will not have an adverse effect on the California brown pelican.

(2) Effect on Sensitive Species with Overlapping Habitat or Roosting Proximity

Delisting of the California brown pelican under the CESA would not negatively affect other CESA or ESA listed species, subspecies, or populations that share the same habitat because their continued protection does not depend upon California brown pelican-specific conservation measures or protections and because the California brown pelican would remain protected under the state "fully protected" species statute and the federal MBTA. Similarly, delisting is not expected to negatively affect other listed or non-listed species that nest or roost in proximity to the California brown

pelican. The following paragraphs review these species and the reasons supporting this conclusion.

(a) California least tern (Sterna antillarum browni)

This is a subspecies of least tern listed as endangered under the ESA and CESA, although the U.S. Fish & Wildlife Service has recommended "down-listing" to "threatened" due to increases in the population. California least terns nest in small colonies and have a discontinuous distribution along beaches of the Pacific Coast of California from San Francisco southward to Bahia Magdalena in Baja California, and at three sites in the northern Gulf of California. In California, nesting is concentrated in Los Angeles, Orange, and San Diego Counties. This subspecies winters along the Pacific coast of southern Mexico and the Gulf of California. However, they are sometimes observed as far north as southern Oregon. They forage in near-shore waters and in shallow estuaries on small fish and aquatic invertebrates, and their food supplies can be affected by strong El Niño/Southern Oscillation events (Akçakaya et al. 2003).

While historic beach nesting habitat for the California least tern has been degraded and colonies are subject to predation from a wide variety of native and non-native predators and/or some form of human disturbance, the numbers of this subspecies have increased in recent decades (US Fish and Wildlife Service 2006).

The 5-year review on the California least tern, published in 2006, recommended downlisting this subspecies to threatened: the population has increased from 600 in 1973 to about 7100 pairs in 2005 (US Fish and Wildlife Service 2006). According to the Status Review, the number of California least tern breeding pairs is six times greater than the number identified in the downlisting and delisting criteria of the Recovery Plan. Other recovery goals have not been met, in part because recovery goals were made prior to demographic studies and modeling and may have been unrealistic and, it appears those additional goals are not necessary to result in substantial increases in the population. For example, a downlisting/delisting criterion in the Recovery Plan was that fledging to adult ratio must be 1.0. However, data since then have shown that populations have increased even with lower productivity levels (USFWS 2006).

As indicated above, the California least tern range overlaps with some of the same southern California coastal areas as the California brown pelican. If the brown pelican is delisted from CESA, it would not affect protections for the California least tern because brown pelican is also a fully protected species pursuant to Fish and Game Code section 3511(b)(2). Any protection from "take" afforded by CESA will continue to exist pursuant to Fish and Game Code section 3511, as the same "take" definition applies both to species listed pursuant to CESA and fully protected species. California least terns are protected under the same federal and state laws as the California brown pelican, including the state "fully protected" statute (California Fish and Game Code § 3511, which also protects the California least tern. Direct federal protections of the California least tern include those afforded through its "endangered" listing status under the ESA (or "threatened" if it is downlisted); Section 404 of the Clean Water Act (most actions in least tern

habitat would require review); the federal Migratory Bird Treaty Act; and the National Environmental Policy Act (USFWS 2006). Under California law, protections are provided through its "endangered" listing status under the CESA, California Coastal Zone Act, and CEQA, among other statutes.

In addition to these provisions, the California least tern and brown pelican benefit from other coastal land conservation planning, including: 1) the U.S. Marine Corps' Camp Pendleton Integrated Natural Resource Management Plan; 2) a 1997 Memorandum of Understanding between the U.S. Fish and Wildlife Service and U.S. Marine Corps' Camp Pendleton; 3) the U.S. Navy/Marine Corps for the conservation of California least tern subpopulations at Naval Air Station North Island; 4) Naval Amphibious Base Coronado, and Camp Pendleton, with special reference to conservation plans in riparian and estuarine/beach ecosystems on Camp Pendleton; 5) implementation of Executive Order 13186 that addresses conservation responsibilities of federal agencies whose actions have a measurable impact on migratory birds; and 6) a 2006 MOU between the USFWS and the Department of Defense further strengthening cooperation on specific conservation measures aimed at migratory birds and the successful nesting of California least tern. The extensive conservation measures and protections described above are having a measurable positive impact on the recovery of the California least tern.

Under the five-factor listing analysis presented in the 2006 Status Review (USFWS 2006), there was no mention of any conservation measures or protections that were dependent upon the CESA or ESA listing of the California brown pelican. If the brown pelican is delisted from CESA, it would not affect protections for the California least tern, as explained above.

(b) Xantus's murrelet (Synthliboramphus hypoleucus)

Xantus's murrelet is listed as threatened under the CESA and its breeding areas overlap to some extent with those of the California brown pelican. For example, they share shrub habitat on Santa Barbara Island (L. Harvey, National Park Service, pers.com.). The Xantus's murrelet is a small and rare seabird that prefers deep, offshore waters of the Pacific Coast along southern California and Baja but dispersing individuals are occasionally found as far north as British Columbia. The known breeding range comprises 12 Pacific Coast islands scattered along 500 miles of coast. The northern extent of their limited breeding range is on the Channel Islands, while the population in Mexico nests on islands off the west coast of Baja California. Nesting occurs in crevices along or near cliffs, under shrubs, man-made debris, and in sea caves. One to two days after hatching, the young fledge and disperse with parents out to sea. Xantus's murrelets feed by diving and swimming underwater in pursuit of small fish and invertebrates. In 2003, the California population was estimated at 3,640 breeding pairs while the entire species was thought to include approximately 8,310 breeding pairs.

The primary nesting area in the Channel Islands is on Santa Barbara Island (80% of the U.S. population), while Anacapa, Santa Cruz, and San Miguel Islands are also used to a lesser degree. The four major threats identified in the 2003 Status Review by California Department of Fish and Game included: non-native mammals

(predation by feral rats and cats; vegetation trampling from goats, sheep, and rabbits), oil spills, native predators (Peregrine falcons, barn owls, and deer mice), and artificial light pollution. Minor threats included: human disturbance at colonies, oceanographic and prey changes, disturbance and mortality from military operations (primarily target practice), and bycatch in gill nets used by fisheries (Burkett et al. 2003).

Like the California brown pelican, nesting areas used by the Xantus's murrelet in the Channel Islands are protected regardless of California brown pelican listing status. Non-breeding areas are in deep waters typically outside of the California brown pelican's range.

Specific steps to increase the recovery of this species have included the eradication of feral cats and rabbits from Santa Barbra Island (rats were never introduced there), while rats were eradicated from Anacapa Island by 2002. These actions have resulted in higher occupancy and nesting success (Whitworth et al. 2005). If the brown pelican is delisted from CESA, it would not affect protections for the Xantus's murrelet because brown pelican is also a fully protected species pursuant to Fish and Game Code section 3511(b)(2). Any protection from "take" afforded by CESA will continue to exist pursuant to Fish and Game Code section 3511, as the same "take" definition applies both to species listed pursuant to CESA and fully protected species.

(c) Pacific Coast population of the western snowy plover (*Charadrius alexandrinus nivosus*)

The Pacific Coast population of the western snowy plover (Charadrius alexandrinus nivosus) is listed as a threatened Distinct Vertebrate Population Segment under the ESA. It has no listing status under the CESA. The breeding range of this population extends from Damon Point, Washington, to Bahia Magdelena, in Baja California, Mexico. The Pacific Coast population of the western snowy plover is known to forage for small invertebrates in wet or dry beach-sand, among tide-cast kelp, within low dune vegetation, dry salt ponds, and river gravel bars (U.S. Fish and Wildlife Service 2007). Designated Critical Habitat includes all suitable habitat from Point Sal to Point Conception including Vandenberg AFB, the Santa Ynez River mouth, and Jalama Beach; Santa Barbara coast beaches including Devereux Beach (Coal Oil Point), Santa Barbara Harbor Beach, and Carpinteria Beach; Oxnard lowlands beaches including San Buenaventura Beach, Mandalay Bay/Santa Clara River mouth, Ormond Beach, and Mugu Lagoon; and the Channel Islands including San Nicolas Island beaches (65 Federal Register 64:68508). Threats are primarily due to poor reproductive success, resulting from human disturbance, predation, inclement weather, tidal action, as well as loss of nesting habitat to encroachment of non-native beachgrass (Ammophila arenaria) and urban development (U.S. Fish and Wildlife Service 2007).

The Pacific Coast population of the western snowy plover overlap in range with that of the California brown pelican and are vulnerable to some the same threats (e.g. oil spills), however, they have a very different life history: they are a beach and inland-dwelling species and their food habits do not overlap. The Recovery Plan for the Pacific Coast population of the western snowy plover (U.S. Fish and Wildlife Service 2007) lists no conservation measures or protections that are dependent upon that of the California brown pelican. If the brown pelican is delisted from CESA, it would not affect protections for the Pacific Coast population of the western snowy plover because brown pelican is also a fully protected species pursuant to Fish and Game Code section 3511(b)(2). Any protection from "take" afforded by CESA will continue to exist pursuant to Fish and Game Code section 3511, as the same "take" definition applies both to species listed pursuant to CESA and fully protected species.

(d) Common murre (*Uria aalge*)

The California subspecies of the common murre has a breeding range that includes southern and central California. The California population is estimated to be about 352,000 breeders (USFWS Seabird Conservation Plan 2005). Year-round, common murres usually remain within 50 km of shore, but are more pelagic in the winter. They are highly social and breed in extremely dense colonies on cliff ledges, flat low-lying islands and the tops of offshore stacks. Adults feed on pelagic zooplankton during the non-breeding season, but feed their chicks squid or whole fish such as herring, sandlance, smelt, anchovy, and juvenile rockfish.

While the widespread global distribution of common murres makes them less susceptible as a species, local populations can be impacted by oil contamination, gillnet mortality, and disturbance. They are highly susceptible to oiling, especially from July to October when chicks fledge and adults may be flightless. Common murres are the most numerous species affected in many spills. Populations in central California that declined due to gillnet and oil spill mortality have started to recover since the adoption of tighter fishery restrictions and active restoration at colonies. Human disturbance (e.g., boats and low flying aircraft) and natural disturbance (e.g., bald eagles and brown pelicans) can cause impacts. Efforts to reduce human disturbance (e.g., seasonal buffer zones to exclude boat traffic, outreach to military and civilian pilots) have benefited nesting murres. The 2005 USFWS Conservation Plan recommends reducing disturbance around major colonies.

Brown pelicans have been associating with common murre breeding colonies in central California resulting in extremely high impacts to murre productivity that may result in the destruction of the Big Sur murre colony (G. McChesney, USFWS, pers. com.). From 2003 to 2007, juvenile pelicans have disturbed murre colonies at Castle Rocks & Mainland and Hurricane Point Rocks on the Big Sur coast. They arrive in July, land among the nesting murres, chase adults off nests, eat murre chicks, and cause mass breeding failures. The Castle Rocks & Mainland colony has experienced complete to near complete breeding failure the last four years, largely because of disturbance by brown pelicans. In 2007, the Hurricane Point Rocks colony also failed because of pelican disturbance. USFWS has also documented similar disturbances from individual juvenile pelicans at Point Reyes, Point Resistance, and Double Point Rocks. At Devil's Slide Rock, groups of

roosting pelicans push murres out of breeding areas when pelicans are present in the breeding season. USFWS is concerned that this behavior may be a more widespread and growing phenomenon indicating that management of brown pelicans may be needed to protect murre colonies.

If the brown pelican is delisted from CESA, it would not adversely affect protections for the common murre because brown pelican is also a fully protected species pursuant to Fish and Game Code section 3511(b)(2). Any protection from "take" afforded by CESA will continue to exist pursuant to Fish and Game Code section 3511, as the same "take" definition applies both to species listed pursuant to CESA and fully protected species.

(e) Western subspecies of double-crested cormorant (*Phalacrocorax auritus albociliatus*)

This subspecies ranges from British Columbia to Baja California. It is the most marine and non-migratory of the six subspecies and does not venture far offshore. Historically, numbers and range of this species were greatly reduced due to reproductive failure caused by DDT, human destruction of nests and shooting of adults. Populations have been recovering since the DDT ban in 1972. Current trends in California are increasing, although numbers in southern California have not yet fully recovered to historical levels (USFWS Seabird Conservation Plan 2005). During 2001-2003 a census of coastal colonies in California, Oregon, and Washington found that the breeding population had doubled (25,600 pairs compared to 12,200 pairs in 1989-91). Populations in San Francisco and Humboldt bays increased, but colonies at the Farallons were an order of magnitude smaller than in the mid-19th century. Along the coast, double-crested cormorants are predominantly ground nesters, mainly on cliffs and islands. Disturbance at breeding sites can be devastating, causing eggs and young to be exposed to predation and inclement weather. This is the only species on West Anacapa Island whose nest sites can be closely mixed in with brown pelican nests, and it has a similar association with brown pelicans on Santa Barbara Island (F. Gress, per. com.).

Double-crested cormorants mostly forage in shallow water and the main prey is schooling species such as surfperch, sticklebacks, sandlance, and herring. Cormorants are restricted to foraging in near shore waters so they can return daily to land to dry their feathers. Recent recovery of double-crested cormorant populations can be attributed to bans on DDT, protection provided by the federal Migratory Bird Treaty Act, and the creation/enhancement of breeding and foraging habitat (USFWS Seabird Conservation Plan 2005). Commercial and sports fisheries often view this species as a pest and a competitor, and it has been subject to USFWS depredation orders in many parts of the nation.

If the brown pelican is delisted from CESA, it would not adversely affect protections for the double-crested cormorants because brown pelican is also a fully protected species pursuant to Fish and Game Code section 3511(b)(2). Any protection from "take" afforded by CESA will continue to exist pursuant to Fish

and Game Code section 3511, as the same "take" definition applies both to species listed pursuant to CESA and fully protected species.

(f) Brandt's cormorant (Phalacrocorax penicillatus)

Brandt's cormorants are endemic to the west coast of North America, with a breeding range extending from southeast Alaska to Baja California. They most commonly forage within 25 km of their colony and rarely more than 10 km from shore. The total breeding population about, 100,000 birds in 2001, represents about a 10% decline compared to censuses conducted in 1975-1981 ((USFWS Conservation Plan 2005). About 75% breed in Oregon and California. Historically, the Farallons supported the largest colony with 23,800 breeding birds in 1974; however, there has been a steady decline at this colony and a concomitant increase at other colonies along the central California coast and the Channel Islands. Brandt's cormorants nest in dense colonies on islands and occasionally at mainland sites along rocky promontories. Nests are constructed of vegetation on flat or sloping areas and on ledges of steep cliffs. Egg-laying occurs from February to June in the Channel Islands. Brandt's cormorants breed on Santa Barbara Island, but not in close proximity to brown pelicans. This is the most common species to roost with brown pelicans.

Brandt's cormorants feed on rockfish, anchovy, blacksmith (*Chromis* spp.), squid and other invertebrates. They often forage in large mixed-species feeding flocks along with pelagic and double-crested cormorants, brown pelicans, gulls, shearwaters, and alcids. Brandt's cormorants restrict their foraging distribution to near shore waters, where they can return to land daily to dry their feathers. The most serious conservation concern for Brandt's cormorants is human disturbance at dense breeding colonies, resulting in increased predation by gulls and ravens and nest abandonment. Exploitation of the prey base by human fisheries is also a concern. Relatively small numbers of Brandt's cormorants are killed as a result of oil contamination and gillnet fisheries. There was no well-documented population decline during the 1960s and 1970s due to eggshell thinning.

If the brown pelican is delisted from CESA, it would not adversely affect protections for the cormorant because brown pelican is also a fully protected species pursuant to Fish and Game Code section 3511(b)(2). Any protection from "take" afforded by CESA will continue to exist pursuant to Fish and Game Code section 3511, as the same "take" definition applies both to species listed pursuant to CESA and fully protected species.

(g) Pelagic cormorant (*Phalacrocorax pelagicus resplendens*)

Pelagic cormorants breed from the Chukchi and Bering Seas south to Japan and northern Baja California. The *resplendens* subspecies is distributed from British Columbia to Baja California. The global population is estimated to be about 400,000 birds of which 69,000 breed in North America and 14,300 breed in California (USFWS Seabird Conservation Plan 2005). This species breeds on

Santa Barbara Island and Anacapa Island, but not in close proximity to brown pelicans. Overall numbers along the west coast have been relatively stable. Breeding sites are generally dispersed along the coast. Pelagic cormorants nest on steep cliffs of the mainland and offshore islands, where they form loose colonies, generally fewer than 100 birds per colony. They disperse throughout their range during the non-breeding season and reach as far south as southern Baja California. They usually forage within 10 km from land during both the breeding and non-breeding seasons. Pelagic cormorants generally feed on small to medium-sized non-schooling fish such as sculpins and rockfish as well as invertebrates.

Pelagic cormorants are sensitive to human disturbance at breeding colonies and will readily abandon nests if disturbed. There is a history of mortality from pesticides and oiling events but the species' vulnerability to oiling is considered moderate. Organochlorine contaminants may still be an issue, especially in California. Mortality in gillnet fisheries is a concern, although it does not appear to be a major threat.

If the brown pelican is delisted from CESA, it would not adversely affect protections for the double-crested cormorants because brown pelican is also a fully protected species pursuant to Fish and Game Code section 3511(b)(2). Any protection from "take" afforded by CESA will continue to exist pursuant to Fish and Game Code section 3511, as the same "take" definition applies both to species listed pursuant to CESA and fully protected species.

(h) Cassin's auklet (*Ptychoramphus aleuticus*)

Cassin's auklets breed from the western Aleutians to central Baja California. The population is estimated at 3.6 million breeding birds, the core of which is in British Columbia. About 50,000 are in California, where the largest colony is on the Farallons (20,000) (USFWS Conservation Plan 2005). This species breeds on Santa Barbara Island, but not in close proximity to brown pelicans. A greater number of Cassin's auklets are seen in California waters in the fall and winter than nest in California, Oregon, and Washington combined. There are seasonal shifts in foraging locations, with post-breeding birds generally occurring farther offshore. During the breeding season, Cassin's auklets are concentrated in waters near their colonies and forage mostly over the outer shelf. Populations appear to be declining at several locations throughout the species' range and several historic colonies have disappeared, mainly due to introduced predators. Reasons for the declines include predation and changes in prey resources.

Cassin's auklets visit some breeding colonies year-round, although they may be absent for months in the fall. Nesting occurs in small and large colonies on coastal islands, and activity at the colonies is nocturnal. Cassin's auklets breed in natural crevices or burrows, which they dig. The breeding season can be extended, with egg-laying occurring between February and August in California. Production of two broods in a single breeding season can occur in California when the food

supply is adequate.

Chicks are fed euphausiids, crustaceans, amphipods, decapods, copepods, mysids, larval squid and fish. Annual survival of adults at the Farallon Islands have been estimated at 67-70%, which is thought to be too low to sustain the population given other life-history parameters. In conjunction with low adult survival at some of the main breeding colonies, Cassin's auklets face several threats, including entanglement in gillnets and other fishing gear and effects of oil spills. Predation by an alien house mouse on eggs and small chicks may occur on the Farallons. Predation of adults by barn owls occurs in the Channel Islands and possibly the Farallons.

If the brown pelican is delisted from CESA, it would not adversely affect protections for Cassin's auklet because brown pelican is also a fully protected species pursuant to Fish and Game Code section 3511(b)(2). Any protection from "take" afforded by CESA will continue to exist pursuant to Fish and Game Code section 3511, as the same "take" definition applies both to species listed pursuant to CESA and fully protected species.

(i) Ashy storm-petrel (Oceanodroma homochroa)

Ashy storm-petrels are small pelagic seabirds, most of which breed in coastal areas and islands off central and southern California. Except for a small colony at Los Coronados Islands, the world population of 10,000 breeding birds has colonies within California (USFWS Conservation Plan 2005). This species has recently become a candidate for listing under the federal ESA. The largest breeding colonies are on the Farallon and Channel islands, which together support approximately 98% of the global population. This species breeds on Santa Barbara Island, but not in close proximity to brown pelicans. On the Farallon Islands, the breeding population is estimated to have declined 42% between 1972 and 1992. This decline is mainly attributed to predation by western gulls, owls, and possibly mice. Population trends at other colonies are not known, although there is no apparent trend in the at-sea numbers in Monterey Bay.

Ashy storm-petrels are non-migratory, and do not disperse much after breeding. They are frequently seen on the edges of upwelling zones and are found year-round in waters just seaward of the continental slope from Cape Mendocino to Baja California, with large fall concentrations in Monterey Bay. Ashy storm-petrels are pelagic, only visiting land to court and breed. Visits to breeding colonies can occur year-round, although are most frequent from February to October. They are nocturnal at breeding colonies. Diet consists of larval fish, squid, and zooplankton, and chicks are fed a meal of semi-digested, oily liquid every 1-3 nights. Ashy storm-petrels will scavenge and are frequently seen around fishing vessels.

Small population size, restricted distribution, concentration at a few colonies, extended chick-rearing period, and low reproductive rates make ashy storm-petrels especially vulnerable to threats. Rats at Anacapa likely had significant effects and

the recent eradication of rats should result in a population increase. Predation of eggs and chicks by introduced house mice (Farallon Islands) and native deer mice (Channel Islands) occurs, although population effects are unknown. Various species of owls migrate to the Farallons in the fall and may be shifting their diet from mice to storm-petrels. Barn owls prey on storm-petrels at Santa Cruz Island. Predation of adults by western gulls is believed to have increased in recent years on the Farallons, as the gull colony has expanded into storm-petrel habitat. Bright lights used by squid boats in the vicinity of the Farallon and Channel islands may disorient storm-petrels, affect their behavior, or enhance avian predation. Plastic ingestion is common for storm-petrels that feed on neuston, and is a potential threat. Oil spills can have devastating effects on seabird populations, although documentation of storm-petrel mortality in oil spills is low.

If the brown pelican is delisted from CESA, it would not adversely affect protections for ashy storm-petrels because brown pelican is also a fully protected species pursuant to Fish and Game Code section 3511(b)(2). Any protection from "take" afforded by CESA will continue to exist pursuant to Fish and Game Code section 3511, as the same "take" definition applies both to species listed pursuant to CESA and fully protected species.

(j) Black storm-petrel (Oceanodroma melania)

Black storm-petrel colonies range from the Channel Islands to the Gulf of California and off the west coast of Baja. The population is estimated to be about 600,000 breeders, 95% of which breed on Islas San Benito, Mexico (USFWS Conservation Plan 2005). About 300 individuals breed at Santa Barbara Island, but not in close proximity to brown pelicans. After the breeding season, a portion of the population moves north to waters off southern and central California while most move south to waters off Central America and South America. Black storm-petrels are found off California in all months, but reach peak abundance in late summer/fall. They are most common in the warm coastal waters in the eastern half of the Southern California Bight and in central California over the continental shelf. Black storm-petrel concentrations off California have increased in recent decades.

Black storm-petrels spend most of their time at sea, coming to land only to breed. Breeding habitat is predominantly small, rocky islands or sloping terrain on larger islands. Black storm-petrels nest in old burrows or crevices, often occupying previously used nesting cavities. Birds return to the California colonies in April or May and are active at colonies only at night. The diet is probably small fish, crustaceans, and squid that occur near the surface. Black storm-petrel populations appear to be limited by the availability of suitable nesting habitat and introduced mammalian predators on Mexican islands. Predation of eggs by native deer mice on Santa Barbara Island is likely to occur. Owls and peregrine falcons are also likely predators at most breeding sites. Bright lights used by squid boats in the vicinity of the Farallon and Channel islands may disorient storm-petrels, affect their behavior, or increase avian predation

If the brown pelican is delisted from CESA, it would not adversely affect

protections for black storm-petrels because brown pelican is also a fully protected species pursuant to Fish and Game Code section 3511(b)(2). Any protection from "take" afforded by CESA will continue to exist pursuant to Fish and Game Code section 3511, as the same "take" definition applies both to species listed pursuant to CESA and fully protected species.

(k) Western gull (Larus occidentalis wymani)

Western gulls are endemic to the west coast of North America, ranging between British Columbia and Baja California. The subspecies wymani ranges from central California to Baja California. The total population is estimated between 80,000 and 126,000 breeding birds, with the majority of the population located in California (50-77%) (USFWS Seabird Conservation Plan 2005). The largest single colony is found on Southeast Farallon Island, with about 16,000-20,000 birds. This species breeds at Santa Barbara Island, but not in close proximity to brown pelicans. Historically, western gull populations were reduced as a result of human efforts to reduce gull numbers in the 1800s. However, populations appear to have increased during the past century due to the restriction of human activity at important breeding sites and increased food availability at dumps but may be leveling off at the turn of the 21st century due to changes in dump management. California population trends indicate a 39% increase between the late 1970s and 1989-1991 (~62,800 breeding birds in 1990), with the greatest increases in the San Francisco Bay and Channel Islands. During the non-breeding season, western gulls are distributed throughout the breeding range, although at greater distances from the colonies than during the breeding season. They forage in inshore and coastal waters and are rarely seen seaward of 25 km from the shelf break.

Western gulls breed primarily on offshore rocks and islands. They are generalist predators, feeding predominantly on fish, marine invertebrates and human refuse. They are also opportunistic scavengers and will feed on eggs, chicks and adult birds. Some major prey items include anchovy, rockfish, Pacific whiting, jack mackerel, Pacific saury, midshipman, white croaker, euphausiids, squid, gooseneck barnacles, pelagic red crabs, sea urchins, clams, limpets and mussels.

Human impacts on western gulls are limited due to remote breeding localities and the resilience of gull individuals and populations. Disturbance to breeding colonies can result in lowered reproductive success and predation of chicks.

If the brown pelican is delisted from CESA, it would not adversely affect protections for western gulls because brown pelican is also a fully protected species pursuant to Fish and Game Code section 3511(b)(2). Any protection from "take" afforded by CESA will continue to exist pursuant to Fish and Game Code section 3511, as the same "take" definition applies both to species listed pursuant to CESA and fully protected species.

(1) Roost Associates

A wide variety of birds roost from time to time in association with brown pelicans.

In addition to species with individual species accounts above, the following are known to roost with brown pelicans: Heerman's gull, California gull, ring-billed gull, Bonaparte's gull, elegant tern, Caspian tern, Forster's tern, black skimmer, marbled godwit, whimbrel, American avocet, willet, long-billed dowitcher, short-billed dowitcher, western sandpiper, least sandpiper, sanderling, black-necked stilt, black oystercatcher, great blue heron, great egret, snowy egret, mallard, northern shoveler, ruddy duck and American white pelican D. Jacques, pers. com.) Large roost sites occur on Rat Rock, East Anacapa Island and Sutil Island.

No impacts are expected to these associations if the brown pelican is delisted from CESA because brown pelican is also a fully protected species pursuant to Fish and Game Code section 3511(b)(2). Any protection from "take" afforded by CESA will continue to exist pursuant to Fish and Game Code section 3511, as the same "take" definition applies both to species listed pursuant to CESA and fully protected species.

In summary, the proposed delisting of California brown pelican is not expected to have any adverse effects on other sensitive species that share the same habitat or have overlapping habitat.

- b. (Effect on riparian or sensitive natural community) The habitat used by California brown pelican consists of rocky nearshore marine areas primarily in the Channel Islands used for breeding, nearshore areas along the coast (and Salton Sea) used for foraging, and some harbors, beaches, sand spits, jetties, piers and estuaries used for resting. Many of these areas represent sensitive natural communities, but the proposed delisting will not alter the protection or planning attention associated with them. Coastal Act policies to reserve environmentally sensitive habitat areas, reflected in local coastal programs, and other protective programs will remain in effect. For these reasons, the proposed delisting will not affect riparian or other sensitive natural communities.
- c. (Effect on wetlands) Habitat used by California brown pelicans includes wetland areas—nearshore marine, harbors, and estuaries as described in the immediately preceding paragraph. As discussed above, the proposed delisting will not have any effect on theses areas.
- d. (Fish or wildlife movement or nursery sites) The proposed delisting will not have any effect on fish or wildlife movement or nursery sites. To the extent that existing protection measures, other than CESA, restrict fishing or human activities for the purpose of improving California brown pelican breeding or other habitat, they may benefit other wildlife and fish as well. Incorporation or expansion of these measures into updated management plans for Channel Islands National Park and National Marine Sanctuary, as recommended by CDFG in their evaluation of the delisting proposal, may lead to slight benefits to fish and wildlife habitat.
- e. (Conflict with local policies) In the areas occupied or used by California brown pelican, local plans and policies are primarily those of federal agencies (National Park Service, Channel Islands National Marine Sanctuary, Bureau of Land Management), or state agencies (California Department of Parks and Recreation). Plans and policies of these agencies already account for the sensitivity of habitat and conditions for California brown pelican and other species in these areas. Foraging and resting areas for California brown

pelican also extend into areas under the control of local entities (cities, counties, harbor districts). Plans and policies of these local agencies are subject to consistency with the requirements and policies of the California Coastal Act, which require protection of environmentally sensitive habitat areas. The proposed delisting will have no effect on local plans and policies; it will neither increase nor decrease protection requirements and will not change the applicability of other state and federal laws and programs. The interagency cooperation, management, and monitoring that is suggested by CDFG as part of its delisting evaluation, may have some beneficial influences. These would include the generation of more data to evaluate the effects of unique influences on California brown pelican populations, and the promotion of more consistent management actions at the local agency and government level.

f. (Conflict with adopted HCP or other plan) The proposed delisting is generally consistent with criteria listed in the California Brown Pelican Recovery Plan (Burkett et al. 2007:8). The delisting evaluation report also recommends coordination and management activities. These recommendations are consistent with the California Wildlife Action Plan (Burkett et al 2007:16). Remaining plans, programs, and requirements, such as the Anacapa Island Special Closure and restrictions established in the Channel Islands National Park management plan, would continue or be updated as appropriate. Thus, the proposed project and related management recommendations are consistent with the adopted recovery plan and other related management plans.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. CL	JLTURAL RESOURCES				
Wo	ould the project:				
a.	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				Х
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?				X
C.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				Х
d.	Disturb any human remains, including those interred outside of formal cemeteries?				Х

- a. The project will not lead to any physical construction or changes in the environment, and thus, will not affect any historic remains or resources.
- b. Extensive and important archaeological remains exist throughout the Channel Islands. The project will not alter the importance of these resources and will not physically alter their condition or affect their protection under existing management plans.
- c. The project will not lead to any physical construction or changes in the environment, and thus, will not affect any paleontological remains or resources.
- d. The project will not lead to any physical construction or changes in the environment, and thus, will not affect any human remains that may be associated with cultural deposits.

Mitigation Measure(s)	
None required.	

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS				
Would the project:				
 Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: 				
 i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. 				×
ii. Strong seismic ground shaking?				Х
iii. Seismic-related ground failure, including liquefaction?				Χ
iv. Landslides?				Χ
b. Result in substantial soil erosion or the loss of topsoil?				Х
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence liquefaction or collapse?				X
 d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? 				Х
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				Х

- a. The project will not involve any new construction or physical changes, and will not influence land use patterns or human activities in a way that will expose people to an increased risk from any seismic related risk.
- b. The project will not involve any new construction or physical changes, and will not alter patterns of soil erosion or loss of topsoil.
- c. The project will not involve any new construction or physical changes, and will not influence land use patterns or human activities in a way that will expose people to an increased risk from any type of soil instability.
- d. The project will not involve any new construction or physical changes, and will not influence land use patterns or human activities in a way that will expose people to an increased risk from expansive soil.
- e. The project will not involve any new construction or physical changes, and will not influence land use patterns or human activities in a way that will rely on disposal of septic effluent.

Mitigation Measure(s)		
None required.		
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		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII.	HAZARDS AND HAZARDOUS ATERIALS				
W	ould the project:				
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				X
C.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d.	Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				Х
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				Х
f.	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				Х
g.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				Х

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
h. Exposed people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X

- a. The project does not involve any physical changes or construction, and will not involve the use of any hazardous materials.
- b. The project does not involve any physical changes or construction, and will not involve the use of any hazardous materials.
- c. The project does not involve any physical changes or construction, and will not involve the use of any hazardous materials within one quarter mile of any school.
- d. The project does not involve any physical changes or construction, and will not influence the distribution of people or their activities. If there are any hazardous material sites within the foraging range of California brown pelican (such as within harbors), they will not be affected in any manner by the project and no change in hazard would occur.
- e. Several public and other major airports extend to within two miles of the California shoreline (San Diego, Los Angeles, and San Francisco International Airports are three examples, and military airports include Point Mugu and Vandenberg Air Force Base). Areas of influence defined in Airport Land Use Plans extend over the shoreline and nearshore marine habitat used by California brown pelicans. Since the project will not involve any construction and will not alter the pattern or intensity of any human use, it will not affect and will not be affected by any safety zones or activities at airports.
- f. It is presumed that there are several private airstrips near the shoreline of California. As with public airports discussed above, the project will not increase or decrease safety hazards associated with these airports.
- g. Since the project will not involve any construction and will not alter the pattern or intensity of any human use, it will not influence any emergency response or evacuation plans.
- h. Since the project will not involve any construction and will not alter the pattern or intensity of any human use, it will not affect or be affected by hazards associated with wildfires.

Mitigation Measure(s)		
None required		

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HY	DROLOGY AND WATER QUALITY				
W	ould the project:				
a.	Violate any water quality standards or waste discharge requirements?				X
b.	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?				X
C.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on or off site?				Х
d.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site?				Х
e.	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				Х
f.	Otherwise substantially degrade water quality?				Х
g.	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				Х
h.	Place within a 100-year flood hazard area structures that would impede or redirect flood flows?				Х

 i. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam? 		X
j. Inundated by seiche, tsunami, or mudflow?		X

- a. Since the project will not involve any construction or discharges of any type, it will not violate any discharge or water quality standards.
- b. Since the project will not involve any construction and will not influence the pattern or intensity of human use, it will not use or influence groundwater supplies in any way.
- c. Since the project will not involve any construction and will not influence the pattern or intensity of human use, it will not affect existing drainage patterns or have any influence on siltation.
- d. Since the project will not involve any construction and will not influence the pattern or intensity of human use, it will not affect existing drainage patterns or have any influence on runoff or flooding.
- e. Since the project will not involve any construction and will not influence the pattern or intensity of human use, it will not affect the capacity of any drainage improvements or lead to the introduction of any pollutants into runoff.
- f. Since the project does not involve any physical changes, it will not otherwise influence water quality.
- g. Since the project does not involve development of housing, or any construction, it will not place any structures within a mapped 100-year flood hazard area.
- h. Since the project does not involve construction of any structures, it will not place structures in a manner that would impede or redirect flood flows.
- i. Since the project does not involve construction of any structures, it will not place structures or people in areas subject to flooding from dam or levee failure.
- j. The habitat of California brown pelican is along nearshore areas that are subject to potential inundation by tsunamis. Since the project does not involve any construction or alternation of the pattern or intensity of human use, no adverse impacts would occur.

Mitigation Measure(s)		
None required.		

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X.	LAND USE AND PLANNING				
	Would the project:				
	a. Physically divide an established community?				Х
	b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X
	c. Conflict with any applicable habitat conservation plan or natural community conservation plan?				Х

- a. The project does not involve any physical construction or changes, so it cannot create any barriers or divisions within an established community.
- b. The project is consistent with applicable plans. See the discussion in Section 5, Compatibility with Existing Zoning and Plans, and the discussion in Section IV.e. Biological Resources Compatibility with Plans, for details.
- c. The project is consistent with applicable habitat plans. See the discussion in Section IV, f. Biological Resources Compatibility with HCPs, for details.

Mitigation Measure(s)	
None required.	

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. MINERAL RESOURCES				
Would the project:				
Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				Х
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				Х

- a. The project does not involve any construction or land alteration that would have any effect on mineral resources.
- b. The project does not involve any construction or land alteration that would have any effect on mineral resources.

Mitigation Measure(s)	
None required.	

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. NO	DISE				
W	ould the project result in:				
а.	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				X
b.	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				X
C.	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				Х
d.	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				Х
e.	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				Х
f.	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				Х

- a. The project does not involve any construction and would not influence the pattern or intensity of human use, so it will have no effect on the exposure of people to noise levels.
- b. The project does not involve any construction and would not influence the pattern or intensity of human use, so it will have no effect on the exposure of people to groundborne vibration or noise.
- c. The project does not involve any construction and would not influence the pattern or intensity of human use, so it will have no permanent effect on ambient noise levels throughout the range of the California brown pelican.
- d. The project does not involve any construction, so it will have no temporary effect on ambient noise levels throughout the range of the California brown pelican.
- e. Several public and other major airports extend to within two miles of the California shoreline (San Diego, Los Angeles, and San Francisco International Airports are three examples, and military airports include Point Mugu and Vandenberg Air Force Base). Areas of influence and noise contours defined in Airport Land Use Plans extend over the shoreline and nearshore marine habitat used by California brown pelicans. Since the project will not involve any construction and will not alter the pattern or intensity of any human use, it will not alter any noise contours and will not change the exposure of any people to aircraft noise levels.
- f. Since the project will not involve any construction and will not alter the pattern or intensity of any human use, it will not alter any noise contours and will not change the exposure of any people to aircraft noise levels originating from private airstrips.

Mitigation Measure(s)		
None required.		

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII.	POPULATION AND HOUSING				
W	ould the project:				
a.	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				Х
b.	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				Х
C.	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				Х

- a. The project does not involve any new construction and will not influence the pattern or intensity of human activity. Therefore, it will not directly or indirectly induce population growth.
- b. The project does not involve any new construction and will not influence the pattern or intensity of human activity. Therefore, it will not displace any existing housing.
- c. The project does not involve any new construction and will not influence the pattern or intensity of human activity. Therefore, it will not displace any people.

Mitigation Measure(s)		
None required.		

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. PUBLIC SERVICES				
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a. Fire protection?				X
b. Police protection?				Χ
c. Schools?				X
d. Parks?				Х
e. Other public facilities?				Х

- a. The project will not involve any construction or physical changes and will not alter the pattern or intensity of human uses. Therefore, it will not affect or require any increase in fire protection services.
- b. The project will not involve any construction or physical changes and will not alter the pattern or intensity of human uses. Therefore, it will not affect or require any increase in police services.
- c. The project will not involve any construction or physical changes and will not alter the pattern or intensity of human uses. Therefore, it will not affect or require any increase in school facilities.
- d. The project will not involve any construction or physical changes and will not alter the pattern or intensity of human uses. Therefore, it will not affect or require any increase in park and recreation facilities.
- e. The project will not involve any construction or physical changes and will not alter the pattern or intensity of human uses. Therefore, it will not affect or require any increase in any other public facilities, the construction of which would have significant environmental impacts.

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None required.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. R	ECREATION				
a.	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b.	Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				Х

- a. The project would not affect the pattern or intensity of human uses, so it would not increase the use of neighborhood or regional park and recreation facilities and would not affect or accelerate the physical deterioration of any such facilities.
- b. The project does not include recreational facilities or the construction of recreational facilities.

Mitigation Measure(s)
None required.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI.	TRANSPORTATION/TRAFFIC				
W	ould the project:				
a.	Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?				X
b.	Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				Х
C.	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				Х
d.	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
e.	Result in inadequate emergency access?				Х
f.	Result in inadequate parking capacity?				Х
g.	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				Х

- a. The project does not involve any construction or physical changes and would not alter the pattern or intensity of human uses. Therefore, it will not cause any increase in traffic.
- b. Since the project will not generate any traffic, it will not contribute to any deterioration of level of service in any transportation facility.
- c. The project will not alter the pattern or intensity of human uses; thus, it will not affect air traffic in any way leading to any change in safety risks.
- d. The project does not involve any roadway construction or the use of any special equipment on roadways. Therefore, it will have no influence at all on hazards due to design features on roads.
- e. The project does not involve any construction or physical changes and would not alter the pattern or intensity of human uses. Therefore, it will not affect the adequacy of emergency access to any point.
- f. The project does not involve any construction or physical changes and would not alter the pattern or intensity of human uses. Therefore, it will not affect parking demand.
- g. The project does not involve any construction or physical changes and would not alter the pattern or intensity of human uses. Therefore, it will not conflict with any plans or policies related to the provision of alternate transportation facilities.

Mitigation Measure(s)	
None required.	

	Potentially Significant Impact	Less Than Significant Impact	No Impact
XVII. UTILITIES AND SERVICE SYST	EMS		
Would the project:			
 a. Exceed wastewater treatment remembers of the applicable Regions Quality Control Board? 			Х
 Require or result in the construction new water or wastewater treatment facilities or expansion of existing facilities, the construction of which cause significant environmental 	nent g ich could		X
c. Require or result in the construction new storm water drainage facilities, to expansion of existing facilities, to construction of which could causignificant environmental effects	ies or he se		Х
 d. Have sufficient water supplies a to serve the project from existin entitlements and resources, or a or expanded entitlements neede 	g are new		Х
e. Result in a determination by the wastewater treatment provider values or may serve the project has adequate capacity to serve project's projected demand in a to the provider's existing commit	vhich that it the ddition		Х
f. Be served by a landfill with suffi permitted capacity to accommo- project's solid waste disposal ne	date the		Х
g. Comply with federal, state, and statutes and regulations related waste?			Х

- a. The project does not involve construction or any physical changes and will not alter the pattern or intensity of human uses. Therefore it will not affect wastewater treatment requirements of any Regional Water Quality Control Board.
- b. The project does not involve construction or any physical changes and will not alter the pattern or intensity of human uses. Therefore it will not require the construction of or expansion of any wastewater treatment facility.
- c. The project does not involve construction or any physical changes and will not alter the pattern or intensity of human uses. Therefore it will not require the construction of any stormwater drainage facilities.
- d. The project does not involve construction or any physical changes and will not alter the pattern or intensity of human uses. Therefore it will not lead to an increase in water consumption or affect any water entitlements.
- e. The project does not involve construction or any physical changes and will not alter the pattern or intensity of human uses. Therefore it will not affect the capacity at any existing wastewater treatment plant, either by itself or in conjunction with other projects.
- f. The project does not involve construction or any physical changes and will not alter the pattern or intensity of human uses. Therefore it will not generate any solid waste and will not require or affect solid waste disposal capacity at any facility.
- g. The project does not involve construction or any physical changes and will not alter the pattern or intensity of human uses. Therefore it will not have any effect on state and local statutes and regulations for the disposal of solid wastes.

Mitigation Measure(s)	
None required.	
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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII.MANDATORY FINDINGS OF SIGNIFICANCE				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self- sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				X
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				X
c. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?				Х

- a. The project's effects on California brown pelican and on other sensitive species that occur in the same habitat are discussed in Section IV. Biological Resources above. Based on the evaluation report by Burkett et al. (2007), and the discussion in Section IV. above, the project will not have an adverse effect on any listed species and will not affect any sensitive habitats. Because the project does not involve any physical changes, it will have no effect on any cultural resources.
 - b. Cumulative Impacts. The U.S. Fish & Wildlife Service (USFWS) has proposed to delist all brown pelicans, including the California brown pelican subspecies, from the federal Endangered Species Act (ESA). The following discussion compares and explains federal and state protection of the brown pelican post-delisting. It shows that if USFWS ultimately delists the brown pelican from the ESA, the combination of the federal delisting and the proposed state delisting would not result in any cumulative impacts under California law. "[A] cumulative impact of a project is an impact to which that project contributes and to which other projects contribute as well. The project must make some contribution to the impact; otherwise, it cannot be characterized as a cumulative impact of that project. (1 Kostka & Zischke, Practice Under the Cal. Environmental Quality Act (Cont. Ed. Bar 2003) § 13.36, p. 533.)" Sierra Club v. The West Side Irrigation District, et al., 128 Cal.App. 4th 690.

In February 2007, USFWS completed its 5-year status review of the brown pelican and concluded that the entire species has recovered and should be delisted. On February 20, 2008, USFWS formally proposed to delist the brown pelican. 73 Fed. Reg. 9408-9433. A public hearing was unnecessary because no one requested one. The comment period closed on April 21, 2008. As part of its proposal to delist the brown pelican, USFWS provided the following discussion of habitat protections that will continue to be in force after delisting (73 Fed. Reg. 9422-23:

U.S. laws that provide protections to brown pelican habitat are the Fish and Wildlife Coordination Act (16 U.S.C. section 661 et seq.), which requires equal consideration and coordination of wildlife conservation with other water resource developments, and the Estuary Protection Act (16 U.S.C. section 1221 et seq.), which requires Federal agencies to assess impacts of commercial and industrial developments on estuaries. Section 10 of the Rivers and Harbors Act (33 U.S.C. section 401 et seq.) regulates the building of any wharfs, piers, jetties, and other structures and the excavation or fill within navigable water. Sections 402 and 404 of the Federal Water Pollution Control Act (33 U.S.C. section 1251 et seq.) as amended by the Clean Water Act (91 Stat. 1566) and the Water Quality Improvement Act (101 Stat. 7), provide for the development of comprehensive programs for water pollution control and efficient and coordinated action to minimize damage from oil discharges.

Additional environmental laws that help protect pelican habitat and food sources include: Emergency Wetlands Resources Act of 1986 (100 Stat. 3585), which authorizes the purchase of wetlands from Land & Water Conservation Fund monies; North American Wetlands Conservation Act of 1989 (103 Stat. 1968) which provides funding for wetland conservation programs in Canada, Mexico, and the United States; Anadromous Fish Conservation Act of 1965 (79 Stat. 1125), which provides funds for conservation, development, and enhancement of anadromous fish (marine fish that breed in fresh water) through cooperation with States and other non-Federal interests; Coastal Barrier Resources Act (96 Stat. 1653), as amended by the Coastal Barrier Improvement Act of 1990, which encourages conservation of hurricane-prone, biologically rich coastal barrier islands by restricting Federal expenditures that encourage development of coastal barrier islands, such as providing National Flood Insurance; Coastal Zone Management Act of 1972 (16 U.S.C. sections 1451-1464), which provides fiscal incentives for the protection, restoration, or enhancement of existing coastal wetlands or creating new coastal wetlands and assessing the cumulative effects of coastal development of coastal wetlands and fishery resources; Shore Protection Act of 1988; Outer Continental Shelf Lands Act of 1954, as amended in 1978 and 1985; National Ocean Pollution Planning Act of 1978; Oil Pollution Act of 1990; Act to Prevent Pollution From Ships of 1980; Marine Pollution and Research and Control Act of 1989; Ocean Dumping Ban Act of 1988; and Marine Protection, Research, and Sanctuaries Act of 1988. These laws and regulations, taken collectively, help ensure the conservation of brown pelicans and their habitat.

In addition, USFWS discussed the continuing protection of brown pelicans afforded by the Migratory Bird Treaty Act (MBTA) after delisting (73 Fed. Reg. 9431, col. 2):

The take of all migratory birds, including brown pelicans, is governed by the MBTA. The MBTA makes it unlawful to at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, offer for sale, sell, offer to barter, barter, offer to purchase, purchase, deliver for shipment, ship, export, import, cause to be shipped, exported, or imported, deliver for transportation, transport or cause to be transported, carry or cause to be carried, or receive for shipment, transportation, carriage, or export, any migratory bird, any part, nest, or eggs of any such bird, or any product, whether or not manufactured, which consists, or is composed in whole or part, of any such bird or any part, nest, or egg thereof (16 U.S.C. section 703(a)). Brown pelicans are among the migratory birds protected by the MBTA. The MBTA regulates the taking of migratory birds

for educational, scientific, and recreational purposes.

Finally, under § 4(g) of the federal ESA, USFWS must "implement a system in cooperation with the states to monitor for not less than five years the status of all species that have recovered and been removed" from the list of species protected by the federal ESA.

The brown pelican is a fully protected bird pursuant to California Fish and Game Code § 3511(b)(2). "[F]ully protected birds or parts thereof may not be taken or possessed at any time" except "the Department may authorize the taking of those species for necessary scientific research, including efforts to recover fully protected, threatened, or endangered species, and may authorize the live capture and relocation of those species pursuant to a permit for the protection of livestock." § 3511(a)(1). Thus the protections afforded by the federal MBTA, as described by the USFWS in its proposal to delist the brown pelican, will remain in force under California as well as federal law.

Based on our review of the potentially significant impacts of the proposed state delisting, there are no cumulative impacts that result from the proposed project, even evaluated in light of the potential federal delisting. The brown pelican is a fully protected species. Because the fully protected species statute also prohibits "take," delisting under CESA or the ESA will have no adverse impact to the pelican. Because there are no impacts associated with this project, the proposed State delisting has no cumulative impacts.

c. The project does not involve construction or other actions that will directly or indirectly affect human beings; therefore it has no impact in this regard.

<u>itigation Measure(s)</u>	
one required.	

Appendix A

Supplemental Information and References Cited

The following pages contain supplemental information that provides more detail regarding information that is summarized in Section IV. Biological Resources of the Initial Study Checklist.

I. DDT: Successful reduction of the primary threat to California brown pelicans

The primary threat to existence of the California brown pelican, that led to its endangered listing under the ESA and CESA (in 1970 and 1971 respectively), was widespread DDT contamination. The bioaccumulation of DDT and its metabolite DDE, resulted in severe eggshell thinning and reproductive failure in brown pelicans (as well as in southern bald eagles and peregrine falcons), causing a precipitous decline in their numbers (Schreiber 1980; U.S. Fish and Wildlife Service 1983). The decline of the brown pelican subspecies that nests along the coast of southern California and northwestern Baja was particularly severe (Jehl 1973).

DDT was first synthesized in 1874 but large-scale manufacturing and usage as an insecticide did not begin until World War II. Although concerns about the effects of unregulated use on fish and wildlife were expressed by the US Fish and Wildlife Service and others starting in 1945 (U.S. Fish and Wildlife Service 1945), DDT use accelerated and it became the top selling insecticide in the U.S. with a peak usage of 70,000,000 pounds in 1959. Although DDT gained wide use in agriculture, mosquito control, and domestic applications, mounting evidence of negative health effects on fish, wildlife, and humans led the newly formed Environmental Protection Agency to cancel its use in 1972 in the U.S. (Federal Register July 7, 1972 37:13369-13376). This almost total ban on use (except in public health or economic emergencies; production and export are still allowed) was a historic first step towards the recovery of the California brown pelican and other affected species (Anderson et al. 1975).

The threat of DDT to California brown pelicans, however, did not cease with the 1972 ban. DDT continued to be manufactured in the U.S. and exported to other countries, which led to continued DDT wastewater pollution in California coastal waters. From 1947 to 1983, Montrose Chemical Corporation manufactured DDT at its plant near Torrance, California. It is estimated by the EPA that from the late 1950's to the early 1970's the plant discharged over 1,700 tons of DDT into Los Angeles sewers that emptied into the Pacific Ocean off White Point on the Palos Verdes Shelf. The affected area is less than 60 miles from brown pelican nesting areas in the Channel Islands. On December 19, 2000, the U.S. Department of Justice and the California Attorney General announced a \$73 million settlement with Montrose Chemical Corporation of California, Aventis CropScience USA Inc., Chris-Craft Industries Inc., and Atkemix Thirty-Seven Inc., companies which either owned or operated DDT-manufacturing plants in Los Angeles

County. A \$140 million monitoring, cleanup, and mitigation program has been initiated by the EPA (http://www.epa.gov/region09/features/pvshelf/links.html). Because that DDT contamination now rests in continental shelf sediments and is only biologically available to bottom feeding species typically not consumed by California brown pelicans, it is no longer a substantial threat to this subspecies.

A third, although lesser, source of DDT pollution persisted until 1988 because of DDT and related manufacturing impurities in a chemically similar compound: Dicofol (Kelthane). The concentration of DDT and DDT analogs in Dicofol was upwards of 20 percent (Cornell University Cooperative Extension Pesticide Management Education Program 1983; Risebrough et al. 1986). Because of concerns over its DDT content, the EPA began a Special Review of Dicofol in December 1983; published Proposed Notice of Intent to cancel registration of pesticide products containing Dicofol (49 FR 39820); and Dicofol was subsequently canceled in 1986. At the time, approximately 3 million pounds per year of Dicofol were applied in the U.S., primarily to citrus and cotton crops. After altering manufacturing processes (Nichols et al. 1987), the percentage of DDT in Dicofol was reduced to less than 0.1 percent and Dicofol was reregistered in 1988 (Environmental Protection Agency 1987, 1988).

As the historical summary above shows, from its first identification with pesticide induced eggshell thinning and health effects in pelicans and other species, it took 43 years for DDT contamination to be successfully eliminated as a threat to California brown pelicans.

II. Reduction of threats from oil spills

Oil spills have potential to cause significant harm to brown pelicans, particularly if they occur near nesting areas in the Channel Islands. According to the California Department of Fish & Game, between 500 and 1,000 pelicans were killed in oil spills over a period of 20 years, or on average about 25-50 pelicans per year (CDFG 2006). The fact is that the Los Angeles/Long Beach and San Francisco Bay harbors are some of the highest volume oil importing ports and refining facilities in the United States. However, after the Alaska's Exxon Valdez (1989) and California's American Trader (1990) oil spills, steps were taken to substantially reduce this risk: the California legislature passed the Oil Spill Prevention and Response Act of 1990 (Chapter 1248, Stats.1990; commonly referred to as SB 2040) and the U.S. Congress passed the Oil Pollution Act of 1990 (33 U.S.C. 2701 to 2761 - and other related sections). As a result of this legislation, the following actions have been implemented to increase vessel safety and prevent spills:

- 1) Harbor Safety Committees were established for the harbors of San Diego, Los Angeles/Long Beach, Hueneme, San Francisco, and Humboldt. These committees have developed harbor safety plans for each port, and identify key safety issues for resolution by the California Office of Spill Prevention and Response.
- 2) Vessel traffic control has been recognized as a key step to reduce the risk of vessel

mishaps off the California coast or within California ports. As a result, "Areas to be Avoided" have been established to restrict the movement of tankers and barges carrying oil as cargo. The ATBA off the California coast recommends that all cargo-carrying ships avoid the area which encompasses the Channel Islands National Marine Sanctuary, except those bound to ports at one of the islands in the sanctuary. "Precautionary areas" were designated in congested areas near harbor entrances to set speed limits, prescribe vessel routing, or establish other safety precautions. "Traffic Separation Schemes" have been designated to direct offshore vessel traffic along portions of the California coastline including the Santa Barbara Channel. Analogous to air traffic lanes, these are internationally recognized vessel routing designations which separate opposing flows of vessel traffic into lanes, including a zone between lanes, where traffic is to be avoided. "Safety fairways" have been established to prohibit the permitting and placement of structures such as oil platforms between a port and the entry into a Traffic Separation Scheme. And finally, "Vessel Traffic Information Services" are in operation in the Ports of Los Angeles/Long Beach and San Francisco Bay to monitor traffic within harbors and approaches and prevent accidents that could result in oil spills.

3) Most significantly, the Oil Spill Prevention and Response Act of 1990 ordered the immediate phase out in U.S. waters of single-hulled tankers. The Act required new oil tankers to be double-hulled, and older single-hulled tankers to be phased out starting in 1995 with the final date for phase out in 2015. The European Union and the International Maritime Organization (the United Nations agency for shipping) have implemented a similar phase out of single-hulled tankers (Stenman 2005). This will ensure that international waters and innocent passages will be transited by double-hulled tankers.

Taken together, the planning and mitigation measures described above have had a measurable positive effect of reducing oils pills in U.S. waters and along coastal areas inhabited by the California brown pelican. In U.S. waters, oil spills of 1,000 gallons or more have decreased from a high of 842 in 1974 to 50 in 2004. Smaller spills of 101-1,000 gallons have decreased from 1,457 to 170 in the same period (U.S. Coast Guard 2006).

III. Literature Cited

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